Gefen®

1:5 Splitter for HDMI® 1.3

EXT-HDMI1.3-145
User Manual

www.gefen.com

ASKING FOR ASSISTANCE

Technical Support:

Telephone	(818) 772-9100
	(800) 545-6900
Fax	(818) 772-9120

Technical Support Hours:
8:00 AM to 5:00 PM Monday thru Friday, Pacific Time

Write To:

Gefen, LLC.
c/o Customer Service
20600 Nordhoff St
Chatsworth, CA 91311

www.gefen.com
support@gefen.com

Notice

Gefen, LLC reserves the right to make changes in the hardware, packaging and any accompanying documentation without prior written notice.

1:5 Splitter For HDMI 1.3 is a trademark of Gefen, LLC

HDMI, the HDMI logo, and **High-Definition Multimedia Interface** are trademarks or registered trademarks of HDMI Licensing in the United States and other countries.

© 2010 Gefen, LLC, All Rights Reserved
All trademarks are the property of their respective owners

CONTENTS

1 Introduction

2 Operation Notes

3 Features

4 Panel Layout

5 Panel Descriptions

6 Connecting And Operating The 1:5 Splitter For HDMI 1.3

7 EDID Management

9 Specifications

10 Warranty

INTRODUCTION

Congratulations on your purchase of the 1:5 Splitter For HDMI 1.3. Your complete satisfaction is very important to us.

Gefen

Gefen delivers innovative, progressive computer and electronics add-on solutions that harness integration, extension, distribution and conversion technologies. Gefen's reliable, plug-and-play products supplement cross-platform computer systems, professional audio/video environments and HDTV systems of all sizes with hard-working solutions that are easy to implement and simple to operate.

The Gefen 1:5 Splitter For HDMI 1.3

The Gefen 1:5 Splitter For HDMI 1.3 allows set-top boxes, DVD players, and other HDTV devices to be connected to four or more HDTV displays. When two or more Splitters are connected together, they can be used to create a larger video signal distribution.

This new unit supports HDMI 1.3 features and passes the higher bandwidth HDMI 1.3 signal for the ultimate in state-of-the-art HDMI signal duplication.

How It Works

The 1:5 Splitter for HDMI 1.3 is connected using an HDMI cable from the HDMI video source to the HDMI splitter input. There are four HDMI outputs. Each output is connected to an HDMI display. Power is connected and all connected displays show an exact replica of the video signal that is input to the Splitter.

OPERATION NOTES

READ THESE NOTES BEFORE INSTALLING OR OPERATING THE 1:5 SPLITTER FOR HDMI 1.3

- By default, display information from the display connected to HDMI output port 1 is sent back to the source. Therefore, the other display connected to the 1:5 Splitter For HDMI 1.3 must be capable of accepting the timings, resolutions and audio formats of the display that is connected to HDMI output port 1. It is recommended that the display with the lowest native resolution be connected to HDMI output port 1. This is to ensure that a compatible video signal will be able to be displayed on all connected monitors. There is a generic EDID programmed into the 1:5 Splitter For HDMI 1.3 that can be used instead. See page 7 for more details.

HDMI 1.3 Features

- 225 MHz (up to 12 bit YUV 444 supported @ 1080p)
- Deep Color
- Color Space Conversion
- Dolby TrueHD and DTS-HD Master Audio
- Lip-Sync
- CEC Pass-Through

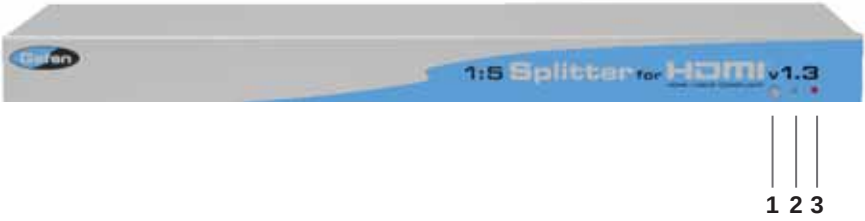
Features

- Simultaneously displays a single Hi-Def source on up to four (4) HDTV displays without signal loss
- Maintains sharp HDTV resolutions up to 1080p Full HD and 2K
- 3DTV Pass-Through
- EDID Management for rapid integration of sources and display devices.
- Mono-LOK™ Locking HDMI Connectors
- Supports the use of DVI sources and DVI displays with an HDMI-to-DVI converter cable or adapter
- HDMI and HDCP compliant

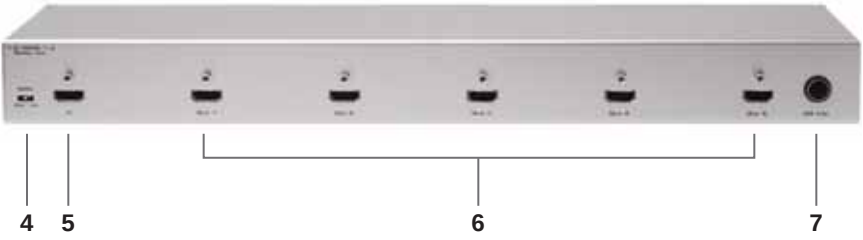
Package Includes

(1) Gefen 1:5 Splitter For HDMI 1.3
(1) 6 ft HDMI cable (M-M)
(1) 5V DC Power Supply
(1) User Manual

Front Panel



Back Panel



PANEL DESCRIPTIONS

1 Reset Button

This button will cycle power on the 1:5 Splitter For HDMI 1.3. If the EDID mode has been changed it will not take effect until the unit has been reset.

2 Internal EDID LED Indicator

This LED indicator will become active when the internal EDID has been selected. This is a built-in EDID.

3 Power LED Indicator

This LED indicator will become active once the included 5V DC power adapter has been properly connected.

4 External EDID LED Indicator

This LED indicator will become active when the external EDID has been selected. This is the EDID from the display connected to HDMI output port 1.

5 Link LED Indicator

This LED indicator will become active when a link between the source device and the 1:5 Splitter For HDMI 1.3 has been established.

6 EDID Selector Switch

Pressing this button will cycle between the internal and external EDID modes. Changing to a new mode will not take effect until the unit is reset.

7 HDMI Input Port

Connect an HDMI or DVI (with a DVI to HDMI adaptor or cable) source device to this input port.

8 HDMI Output Ports 1 - 5

Connect up to 5 HDMI or DVI (with a HDMI to DVI adapter or cable) displays to these output ports. The display connected to the port labeled OUT 1 will have its EDID used when the external mode is active.

9 5V DC Power Input

Connect the included 5V DC power supply to this input port.

CONNECTING AND OPERATING THE 1:5 SPLITTER FOR HDMI 1.3

How to Connect the 1:5 Splitter For HDMI 1.3

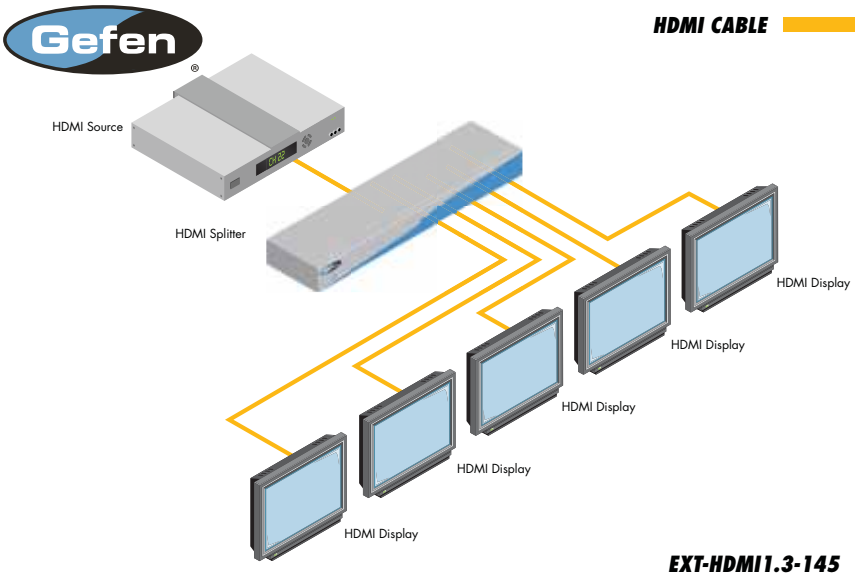
1. Connect the HDMI or DVI (with a DVI to HDMI adapter or cable) source device to the 1:5 Splitter For HDMI 1.3 HDMI input port using the supplied HDMI cable.

2. Connect up to 5 HDMI or DVI (with a HDMI to DVI adapter or cable) displays to the 1:5 Splitter For HDMI 1.3 output ports using user supplied HDMI cables.

3. Connect the included 24V DC power adapter to the 1:5 Splitter For HDMI 1.3 power input port.

4. Power on the displays first and then the source.

Wiring Diagram for the Gefen 1:5 Splitter For HDMI 1.3



EDID Mode Selection

1. EXTERNAL MODE:

See page 8 for details on using the External EDID.

2. INTERNAL MODE:

To use this mode, press the EDID button on the rear panel until the front-panel LED marked “Int” turns bright green. This mode will use a preset EDID, from the factory, that is stored in the Gefen 1:5 Splitter For HDMI 1.3. This pre-programmed standard EDID data structure is compatible with most A/V display devices. All resolutions and audio formats specified in this EDID will be passed to the source device. See the tables below for a complete listing of the resolutions and audio formats listed in this EDID.

NOTE: All other HDMI devices/displays connected to the output ports **MUST** be compatible with at least one resolution/audio format specified in this EDID. It is recommended to set, on the source device, a common resolution and audio format shared by all attached devices/displays. This is to ensure a compatible signal is output to all connected devices/displays.

Internal EDID Video Timings

Timing	Refresh Rate	Timing	Refresh Rate
1280 x 720p	50 Hz	720 x 576p	50 Hz
1280 x 720p	59.94 / 60 Hz	1920 x 1080p	50 Hz
1920 x 1080i	50 Hz	1920 x 1080p	59.94 / 60 Hz
1920 x 1080i*	59.94 / 60 Hz	1440 x 480p	59.94 / 60 Hz
720 x 480p	59.94 / 60 Hz	1440 x 576p	50 Hz

* Native Resolution

Internal EDID Audio Formats

Audio Format	Supported Channels
LPCM	2CH
AC-3	2CH / 5.1CH
DTS	2CH / 5.1CH

External EDID Management

The 1:5 Splitter For HDMI 1.3 features EDID Management. Before the source can send video or audio signals, the source device reads the EDID (Extended Display Identification Data) from the output devices connected to the Splitter. The EDID contains information about what type of A/V data that the source can send to each output device.

The 1:5 Splitter For HDMI 1.3 distributes a single source to multiple output devices. This involves reading EDID data from more than one device. Management of the EDID data is important to maintain compatibility between all devices.

The following EDID features are copied from Output 1:

- Supported Resolutions
- 3D Support
- Audio Features

EDID color features are built based on all attached displays, using the following rules:

- Deep Color will be *enabled* if one or more displays are connected to the Splitter supporting Deep Color.
- xvYCC (x.v.Color) is supported if all connected displays support it.

Display Connections:

- If a display is not connected to Output 1, then no EDID changes are made, meaning that the previous EDID information will be used. This state will be in effect until a display is connected to Output 1 and the Splitter is power-cycled.
- EDID is built from Output 1 to the Input. The audio block will be copied from Output 1. EDID-copying is performed only when the Splitter is reset or power-cycled.

SPECIFICATIONS

Video Amplifier Bandwidth ..... 225 MHz

Input Video Signal ..... 1.2 Volts p-p

Input DDC Signal ..... 5 Volts p-p (TTL)

Single Link Range ..... 1080p/60 12 Bit Color Depth, 1920x1200

HDMI Connectors ..... (6) Type A ,19 Pin Female

Power Consumption ..... 60 Watts (max)

Power Supply ..... 24V DC

Dimensions ..... 9.4”W x 1”H x 4.6”D

Shipping Weight ..... 5 lbs.

WARRANTY

Gefen warrants the equipment it manufactures to be free from defects in material and workmanship.

If equipment fails because of such defects and Gefen is notified within two (2) years from the date of shipment, Gefen will, at its option, repair or replace the equipment, provided that the equipment has not been subjected to mechanical, electrical, or other abuse or modifications. Equipment that fails under conditions other than those covered will be repaired at the current price of parts and labor in effect at the time of repair. Such repairs are warranted for ninety (90) days from the day of reshipment to the Buyer.

This warranty is in lieu of all other warranties expressed or implied, including without limitation, any implied warranty or merchantability or fitness for any particular purpose, all of which are expressly disclaimed.

1. Proof of sale may be required in order to claim warranty.

2. Customers outside the US are responsible for shipping charges to and from Gefen.

3. Copper cables are limited to a 30 day warranty and cables must be in their original condition.

The information in this manual has been carefully checked and is believed to be accurate. However, Gefen assumes no responsibility for any inaccuracies that may be contained in this manual. In no event will Gefen be liable for direct, indirect, special, incidental, or consequential damages resulting from any defect or omission in this manual, even if advised of the possibility of such damages. The technical information contained herein regarding the features and specifications is subject to change without notice.

For the latest warranty coverage information, please visit Gefen's Warranty web page at http://www.gefen.com/kvm/aboutus/warranty.jsp

PRODUCT REGISTRATION

Please register your product online by visiting Gefen's web site at http://www.gefen.com/kvm/Registry/Registration.jsp

Rev B2
2.1M

20600 Nordhoff St., Chatsworth CA 91311

1-800-545-6900 818-772-9100 fax: 818-772-9120

www.gefen.com support@gefen.com